FACT SHEET FOR
STATE WASTE DISCHARGE
PERMIT NO. ST-9253

SUN OPTA: KETTLE VALLEY DRIED FRUIT COMPANY

SUMMARY

Sun Opta: Kettle Valley Dried Fruit Company (Sun Opta) contacted the City of Omak in regards to locating its processed fruit drying plant there in August of 2004. On September 20, 2004 Sun Opta submitted a wastewater discharge permit application to the Department. Monitoring of the Sun Opta wastewater by the City of Omak began on September 10, 2004.

Sun Opta has contracted with the City of Omak to discharge its process wastewater to the City of Omak POTW. The limitations outlined in the contract and contained in Appendix A of the Operations and Maintenance Manual constitute the enforceable limitations of this permit.

Sun Opta estimates that it will process approximately 25 to 35 thousands pounds of juice grade apples a day, dependant on the time of the year. The apples are ground into a puree, which is spread on trays and then dried. The dried fruit is then cut into strips and packaged for shipping.

Operations in the plant are designed to minimize the amount of waste fruit particles entering the discharge, which could contribute to the BOD loading. This includes screens in the drains and installation of a 1200 gallon dual chamber holding tank. The inlet chamber of the holding tank is where the bulk of the solids settles. The supernatant is pumped to the second chamber. The inlet chamber (settling chamber) will be pumped out by a licensed septic hauler on a set schedule. The second chamber outlet directs the wastewater to a three stage filtration unit prior to discharge to the City.

A recent inspection found problems with solid waste storage and containment of liquid leaking to ground. A solid waste plan and containment of liquid waste will be required in the proposed permit.

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INTRODUCTION

This fact sheet is a companion document to the draft State Waste Discharge Permit No. ST-9253. The Department of Ecology (the Department) is proposing to issue this permit, which will allow discharge of wastewater to the City of Omak's POTW. This fact sheet explains the nature of the proposed discharge, the Department's decisions on limiting the pollutants in the wastewater, and the regulatory and technical bases for those decisions.

Washington State law (RCW 90.48.080 and 90.48.160) requires that a permit be issued before discharge of wastewater to waters of the State is allowed. This statute includes commercial or industrial discharges to sewerage systems operated by municipalities or public entities which discharge into public waters of the State. Regulations adopted by the State include procedures for issuing permits and establish requirements which are to be included in the permit (Chapter 173-216 WAC).

This fact sheet and draft permit are available for review by interested persons as described in Appendix A--Public Involvement Information.

The fact sheet and draft permit have been reviewed by the Permittee. Errors and omissions identified in these reviews have been corrected before going to public notice. After the public comment period has closed, the Department will summarize the substantive comments and the response to each comment. The summary and response to comments will become part of the file on the permit and parties submitting comments will receive a copy of the Department's response. The fact sheet will not be revised. Changes to the permit will be addressed in Appendix D -- Response to Comments.

GENERAL INFORMATION	
Applicant	Sun Opta Inc.
Facility Name and Address	Sun Opta: Kettle Valley Dried Fruit Company 1124 East 5th Street Omak, WA 98841
Type of Facility:	Fruit Processing
Facility Discharge Location	Latitude: 48° 24' 291" N Longitude: 119° 30' 721" W
Treatment Plant Receiving Discharge	City of Omak POTW
Contact at Facility	Name: Terry Llewellyn Telephone #: 509-876-5471
Responsible Official	Name: Peter Kendall, General Manager Address: PO Box 1168, Summerland, B.C. Canada V0HIZ0 Telephone #: 250.494.0335 FAX # 250.494.0334

BACKGROUND INFORMATION

DESCRIPTION OF THE FACILITY

History

Sun Opta: Kettle Valley Dried Fruit Company (Sun Opta) contacted the City of Omak on August of 2004 in regards to locating its processed fruit drying plant there. On September 20, 2004 Sun Opta submitted a wastewater discharge permit application to the Department. Monitoring of the Sun Opta wastewater by the City began on September 10, 2004.

Industrial Processes

Sun Opta estimates that it will process approximately 25 to 35 thousand pounds of juice grade apples a day, dependant on the time of the year. The apples are ground into a puree, which is spread on trays and then dried. The dried fruit is then cut into strips and packaged for shipping.

Treatment Processes

Operations in the plant are designed to minimize the amount of waste fruit particles entering the discharge, which could contribute to the Biological Oxygen Demand (BOD) loading. This includes screens in the drains and installation of a 1200 gallon dual chamber holding tank. The inlet chamber of the holding tank is where the bulk of the solids settle. The supernatant is

pumped to the second chamber. The inlet chamber (settling chamber) will be pumped out on a set schedule by a licensed septic hauler and land applied at the hauler's licensed land application site. The second chamber outlet directs the wastewater to a three stage filtration unit prior to discharge to the City.

PERMIT STATUS

This is a new facility. An application for a permit was received by the Department on September 20, 2004 and accepted by the Department on December 13, 2004. A Temporary State Waste Discharge Permit No. ST-9253 was issued to the Permittee on February 6, 2005.

SUMMARY OF COMPLIANCE WITH THE PREVIOUS PERMIT

The facility last received an inspection on July 14, 2005. Installation of a sampling station was reported as having been completed and in operation. The effluent flow meter was installed incorrectly and has since been corrected. It is the understanding of the Department that the flow meter is recording flow not only from Sun Opta but the flow from a neighboring facility as well. This is a result of preexisting piping configurations and exiting construction. Sun Opta and the City are planning to install an additional flow meter to determine the discreet flows from the two facilities.

A recent inspection found problems with solid waste storage and containment of liquid leaking to ground. A solid waste plan and containment of liquid waste will be required in the proposed permit. In addition, a recent visit to the facility disclosed a floor drain in the plant was discharging to a dry well used for stormwater retention. The floor drain has since been plugged.

WASTEWATER CHARACTERIZATION

Table 1 contains the concentration of pollutants in the discharge determined with the available monitoring data from approximately six months of monitoring (Tabulated in Appendix C). The proposed wastewater discharge is characterized for the following parameters:

Table 1: Wastewater Characterization

Parameter	6-Month Average	Highest Daily Maximum
Flow MGD	0.007	0.025
pH	NA*	7.2 (max) 6.2 (min)
BOD_5, in mg/L	2325.5	4789.0
BOD lbs/Day	151.6	447.0
TSS, in mg/L	222.0	771.0
TSS lbs/Day	13.0	53.0

* NA means Not Applicable

PROPOSED PERMIT LIMITATIONS

State regulations require that limitations set forth in a waste discharge permit must be based on the technology available to treat the pollutants (technology-based) or be based on the effects of the pollutants to the POTW (local limits). Wastewater must be treated using all known, available, and reasonable methods of prevention, control and treatment (AKART) and not interfere with the operation of the POTW.

The more stringent of the local limits-based or technology-based limits are applied to each of the parameters of concern. Each of these types of limits is described in more detail below.

EFFLUENT LIMITATIONS BASED ON LOCAL LIMITS

In order to protect the City of Omak's POTW from pass-through, interference, concentrations of toxic chemicals that would impair beneficial or designated uses of sludge, or potentially hazardous exposure levels, limitations for certain parameters are necessary. These limitations are based on local limits established by the City of Omak Industrial Wastewater User Contract with Sun Opta: Kettle Valley Dried Fruit Company. The enforceable limits of this discharge are contained in Appendix A of the Permittee's Operations & Maintenance Manual.

In addition, pH shall be between 5 and 11 at all times.

MONITORING REQUIREMENTS

Monitoring, recording, and reporting are specified to verify that the treatment process is functioning correctly, and that effluent limitations are being achieved (WAC 173-216-110).

The monitoring schedule is detailed in the proposed permit under Special Condition S2. Specified monitoring frequencies take into account the quantity and variability of the discharge, the treatment method, past compliance, significance of pollutants, and cost of monitoring.

OTHER PERMIT CONDITIONS

REPORTING AND RECORDKEEPING

The provisions of Special Condition S3 are based on the authority to specify any appropriate reporting and recordkeeping requirements to prevent and control waste discharges (WAC 173-216-110 and 40 CFR 403.12 (e),(g), and (h)).

OPERATIONS AND MAINTENANCE (O&M)

The proposed permit contains Special Condition S5. as authorized under Chapter 173-240-150 WAC and Chapter 173-216-110 WAC. It is included to ensure proper operation and regular maintenance of equipment, and to ensure that adequate safeguards are taken so that constructed facilities are used to their optimum potential in terms of pollutant capture and treatment. The proposed permit requires submission of an O&M manual for the entire wastewater system.

PROHIBITED DISCHARGES

Certain pollutants are prohibited from being discharged to the POTW. These include substances which cause pass-through or interference, pollutants which may cause damage to the POTW or harm to the POTW workers (Chapter 173-216 WAC) and the discharge of designated dangerous wastes not authorized by this permit (Chapter 173-303 WAC).

DILUTION PROHIBITED

The Permittee is prohibited from diluting its effluent as a partial or complete substitute for adequate treatment to achieve compliance with permit limitations.

SOLID WASTE PLAN

The Department has determined that the Permittee stores quantities of fruit that has a potential to cause pollution of the waters of the State from leachate of solid waste.

This proposed permit requires, under authority of RCW 90.48.080, that the Permittee develop and submit to the Department a Solid Waste Plan to prevent solid waste from causing pollution of waters of the State. The plan must be placed in Appendix B of the 0&M Manual and also be submitted to the local solid waste permitting agency for approval, if required by local ordinance.

COMBINED SPILL AND SLUG DISCHARGE PREVENTION AND CONTROL PLAN

The Department has determined that the Permittee stores a quantity of chemicals that have the potential to cause water pollution if accidentally released. The Department has the authority to require the Permittee to develop best management plans to prevent this accidental release under section 402(a)(1) of the Federal Water Pollution Control Act (FWPCA) and RCW 90.48.080.

The proposed permit requires the Permittee to develop and implement a combined Spill and Slug Discharge Prevention and Control Plan for preventing the accidental release of pollutants to State waters and/or the POTW for minimizing damages if such a discharge occurs. The Department approved plan will be required to be placed in Appendix B of the O&M Manual.

GENERAL CONDITIONS

General Conditions are based directly on State laws and regulations and have been standardized for all industrial waste discharge to POTW permits issued by the Department.

Condition G1 requires responsible officials or their designated representatives to sign submittals to the Department. Condition G2 requires the Permittee to allow the Department to access the treatment system, production facility, and records related to the permit. Condition G3 specifies conditions for modifying, suspending or terminating the permit. Condition G4 requires the Permittee to apply to the Department prior to increasing or varying the discharge from the levels stated in the permit application. Condition G5 requires the Permittee to construct, modify, and operate the permitted facility in accordance with approved engineering documents. Condition G6 prohibits the Permittee from using the permit as a basis for violating any laws, statutes or regulations. Conditions G7 relates to permit renewal and transfer. Condition G8 requires the Permittee to control production or wastewater discharge in order to maintain compliance with the permit. Condition G9 prohibits the reintroduction of removed pollutants into the effluent stream for discharge. Condition G10 requires the payment of permit fees. Condition G11 describes the penalties for violating permit conditions.

PUBLIC NOTIFICATION OF NONCOMPLIANCE

A list of all industrial users which were in significant noncompliance with Pretreatment Standards or Requirements during any of the previous four quarters may be annually published by the Department in a local newspaper. Accordingly, the Permittee is apprised that noncompliance with this permit may result in publication of the noncompliance.

RECOMMENDATION FOR PERMIT ISSUANCE

This proposed permit meets all statutory requirements for authorizing a wastewater discharge, including those limitations and conditions believed necessary to control toxics. The Department proposes that the permit be issued for 5 years.

REFERENCES FOR TEXT AND APPENDICES

Washington State Department of Ecology.

Laws and Regulations(http://www.ecy.wa.gov/laws-rules/index.html)

Permit and Wastewater Related Information
(http://www.ecy.wa.gov/programs/wq/wastewater/index.html

APPENDIX A--PUBLIC INVOLVEMENT INFORMATION

The Department has tentatively determined to issue a permit to the applicant listed on page 1 of this fact sheet. The permit contains conditions and effluent limitations which are described in the rest of this fact sheet.

Public notice of application was published on December 29, 2004 and January 5, 2005 in the Omak Okanogan County Chronicle to inform the public that an application had been submitted and to invite comment on the reissuance of this permit.

The Department will publish a Public Notice of Draft (PNOD) on March 1, 2006 in the Omak-Okanogan County Chronicle to inform the public that a draft permit and fact sheet are available for review. Interested persons are invited to submit written comments regarding the draft permit. The draft permit, fact sheet, and related documents are available for inspection and copying between the hours of 8:00 a.m. and 5:00 p.m. weekdays, by appointment, at the regional office listed below. Written comments should be mailed to:

Water Quality Permit Coordinator
Department of Ecology
Central Regional Office
15 West Yakima Avenue, Suite 200
Yakima, WA 98902

Any interested party may comment on the draft permit or request a public hearing on this draft permit within the 30 day comment period to the address above. The request for a hearing shall indicate the interest of the party and reasons why the hearing is warranted. The Department will hold a hearing if it determines there is a significant public interest in the draft permit (WAC 173-216-100). Public notice regarding any hearing will be circulated at least 30 days in advance of the hearing. People expressing an interest in this permit will be mailed an individual notice of hearing.

Comments should reference specific text followed by proposed modification or concern when possible. Comments may address technical issues, accuracy and completeness of information, the scope of the facility's proposed coverage, adequacy of environmental protection, permit conditions, or any other concern that would result from issuance of this permit.

The Department will consider all comments received within 30 days from the date of public notice of draft indicated above, in formulating a final determination to issue, revise, or deny the permit. The Department's response to all significant comments is available upon request and will be mailed directly to people expressing an interest in this permit.

Further information may be obtained from the Department by telephone, 509/457-7105, or by writing to the address listed above.

This permit was written by Richard Marcley.

APPENDIX B--GLOSSARY

Ammonia—Ammonia is produced by the breakdown of nitrogenous materials in wastewater. Ammonia is toxic to aquatic organisms, exerts an oxygen demand, and contributes to eutrophication. It also increases the amount of chlorine needed to disinfect wastewater.

Average Monthly Discharge Limitation—The average of the measured values obtained over a calendar month's time.

Best Management Practices (BMPs)--Schedules of activities, prohibitions of practices, maintenance procedures, and other physical, structural and/or managerial practices to prevent or reduce the pollution of waters of the State. BMPs include treatment systems, operating procedures, and practices to control: plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. BMPs may be further categorized as operational, source control, erosion and sediment control, and treatment BMPs.

BOD_5--Determining the Biochemical Oxygen Demand of an effluent is an indirect way of measuring the quantity of organic material present in an effluent that is utilized by bacteria. The BOD_5 is used in modeling to measure the reduction of dissolved oxygen in a receiving water after effluent is discharged. Stress caused by reduced dissolved oxygen levels makes organisms less competitive and less able to sustain their species in the aquatic environment. Although BOD is not a specific compound, it is defined as a conventional pollutant under the Federal Clean Water Act.

Bypass—The intentional diversion of waste streams from any portion of the collection or treatment facility.

Categorical Pretreatment Standards—National pretreatment standards specifying quantities or concentrations of pollutants or pollutant properties which may be discharged to a POTW by existing or new industrial users in specific industrial subcategories.

Compliance Inspection - Without Sampling--A site visit for the purpose of determining the compliance of a facility with the terms and conditions of its permit or with applicable statutes and regulations.

Compliance Inspection - With Sampling--A site visit to accomplish the purpose of a Compliance Inspection - Without Sampling and as a minimum, sampling and analysis for all parameters with limits in the permit to ascertain compliance with those limits; and, for municipal facilities, sampling of influent to ascertain compliance with the 85 percent removal requirement. Additional sampling may be conducted.

Composite Sample—A mixture of grab samples collected at the same sampling point at different times, formed either by continuous sampling or by mixing discrete samples. May be

"time-composite"(collected at constant time intervals) or "flow-proportional" (collected either as a constant sample volume at time intervals proportional to stream flow, or collected by increasing the volume of each aliquot as the flow increased while maintaining a constant time interval between the aliquots.

Construction Activity—Clearing, grading, excavation and any other activity which disturbs the surface of the land. Such activities may include road building, construction of residential houses, office buildings, or industrial buildings, and demolition activity.

Continuous Monitoring –Uninterrupted, unless otherwise noted in the permit.

Engineering Report—A document, signed by a professional licensed engineer, which thoroughly examines the engineering and administrative aspects of a particular domestic or industrial wastewater facility. The report shall contain the appropriate information required in WAC 173-240-060 or 173-240-130.

Grab Sample—A single sample or measurement taken at a specific time or over as short period of time as is feasible.

Industrial User—A discharger of wastewater to the sanitary sewer which is not sanitary wastewater or is not equivalent to sanitary wastewater in character.

Industrial Wastewater—Water or liquid-carried waste from industrial or commercial processes, as distinct from domestic wastewater. These wastes may result from any process or activity of industry, manufacture, trade or business, from the development of any natural resource, or from animal operations such as feed lots, poultry houses, or dairies. The term includes contaminated storm water and, also, leachate from solid waste facilities.

Interference— A discharge which, alone or in conjunction with a discharge or discharges from other sources, both:

Inhibits or disrupts the POTW, its treatment processes or operations, or its sludge processes, use or disposal and;

Therefore is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation) or of the prevention of sewage sludge use or disposal in compliance with the following statutory provisions and regulations or permits issued thereunder (or more stringent State or local regulations): Section 405 of the Clean Water Act, the Solid Waste Disposal Act (SWDA) (including title II, more commonly referred to as the Resource Conservation and Recovery Act (RCRA), and including State regulations contained in any State sludge management plan prepared pursuant to subtitle D of the SWDA), sludge regulations appearing in 40 CFR Part 507, the Clean Air Act, the Toxic Substances Control Act, and the Marine Protection, Research and Sanctuaries Act.

Local Limits—Specific prohibitions or limits on pollutants or pollutant parameters developed by a POTW.

Maximum Daily Discharge Limitation—The highest allowable daily discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling.

Method Detection Level (MDL)--The minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is above zero and is determined from analysis of a sample in a given matrix containing the analyte.

Pass-through— A discharge which exits the POTW into waters of the State in quantities or concentrations which, alone or in conjunction with a discharge or discharges from other sources, is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation), or which is a cause of a violation of State water quality standards.

pH—The pH of a liquid measures its acidity or alkalinity. A pH of 7 is defined as neutral, and large variations above or below this value are considered harmful to most aquatic life.

Potential Significant Industrial User--A potential significant industrial user is defined as an Industrial User which does not meet the criteria for a Significant Industrial User, but which discharges wastewater meeting one or more of the following criteria:

a. Exceeds 0.5 % of treatment plant design capacity criteria and discharges <25,000 gallons per day or;
b. Is a member of a group of similar industrial users which, taken together, have the potential to cause pass through or interference at the POTW (e.g. facilities which develop photographic film or paper, and car washes).

The Department may determine that a discharger initially classified as a potential significant industrial user should be managed as a significant industrial user.

Quantitation Level (QL)-- A calculated value five times the MDL (method detection level).

Significant Industrial User (SIU)--
1) All industrial users subject to Categorical Pretreatment Standards under 40 CFR 403.6 and 40 CFR Chapter I, Subchapter N and;

2) Any other industrial user that: discharges an average of 25,000 gallons per day or more of process wastewater to the POTW (excluding sanitary, noncontact cooling, and boiler blow-down wastewater); contributes a process wastestream that makes up 5 percent or more of the average

dry weather hydraulic or organic capacity of the POTW treatment plant; or is designated as such by the Control Authority* on the basis that the industrial user has a reasonable potential for adversely affecting the POTW's operation or for violating any pretreatment standard or requirement (in accordance with 40 CFR 403.8(f)(6)).

Upon finding that the industrial user meeting the criteria in paragraph 2, above, has no reasonable potential for adversely affecting the POTW's operation or for violating any pretreatment standard or requirement, the Control Authority* may at any time, on its own initiative or in response to a petition received from an industrial user or POTW, and in accordance with 40 CFR 403.8(f)(6), determine that such industrial user is not a significant industrial user.

*The term "Control Authority" refers to the Washington State Department of Ecology in the case of non-delegated POTWs or to the POTW in the case of delegated POTWs.

Slug Discharge—Any discharge of a non-routine, episodic nature, including but not limited to an accidental spill or a non-customary batch discharge to the POTW. This may include any pollutant released at a flow rate which may cause interference with the POTW.

State Waters—Lakes, rivers, ponds, streams, inland waters, underground waters, salt waters, and all other surface waters and watercourses within the jurisdiction of the State of Washington.

Stormwater—That portion of precipitation that does not naturally percolate into the ground or evaporate, but flows via overland flow, interflow, pipes, and other features of a storm water drainage system into a defined surface water body, or a constructed infiltration facility.

Technology-based Effluent Limit—A permit limit that is based on the ability of a treatment method to reduce the pollutant.

Total Coliform Bacteria—A microbiological test which detects and enumerates the total coliform group of bacteria in water samples.

Total Dissolved Solids—That portion of total solids in water or wastewater that passes through a specific filter.

Total Suspended Solids (TSS)--Total suspended solids is the particulate material in an effluent. Large quantities of TSS discharged to a receiving water may result in solids accumulation. Apart from any toxic effects attributable to substances leached out by water, suspended solids may kill fish, shellfish, and other aquatic organisms by causing abrasive injuries and by clogging the gills and respiratory passages of various aquatic fauna. Indirectly, suspended solids can screen out light and can promote and maintain the development of noxious conditions through oxygen depletion.

Water Quality-based Effluent Limit—A limit on the concentration of an effluent parameter that is intended to prevent the concentration of that parameter from exceeding its water quality criterion after it is discharged into a receiving water.

APPENDIX C--TECHNICAL CALCULATIONS

Sun Opta: Kettle Valley Dried Fruit Effluent Monitoring Results

DATE	Flow MGD	pH	BOD mg/L	BOD lbs/Day	TSS mg/L	TSS lbs/Day
12/15/2005	0.0054	7.6	1335	60.0	121.0	5.4
12/7/2005	0.0032	7.4	1470	39.7	207.0	5.7
11/24/2005	0.0023	7.1	1983	37.6	134.0	2.5
11/24/2005	0.0025	7.2	1861	38.9	231.0	4.8
11/16/2005	0.0043	7.2	1115	39.6	102.0	3.6
11/11/2005	0.0032	6.6	2484	65.9	279.0	7.4
11/3/2005	0.0019	6.4	2484	39.7	142.0	2.3
10/26/2005	0.0018	6.2	3164	47.5	201.0	3.0
10/21/2005	0.0052	7.3	1052	45.7	168.0	7.3
10/13/2005	0.0097	6.7	1792	145.0	378.0	30.7
10/0/5/05	0.0097	7.0	1706	138.4	185.0	15.0
9/30/2005	0.0097	7.6	1828	148.2	160.0	12.9
10/27/2004	0.0082		3858	265.0	173.0	12.0
10/19/2004	0.0067		4789	269.0	291.0	16.0
10/15/2004	0.0254 *		2108	447.0	129.0	27.0
	0.0082			444.0	771.0	53.0
9/28/2004	0.0060		2879	144.0	290.0	14.0
9/22/2004	0.0075		1696	106.0	141.0	9.0
9/21/2004	0.0082		2657	182.0	299.0	21.0
9/15/2004	0.0097		2146	174.0	97.0	8.0
9/10/2004	0.0089		4102	307.0	162.0	12.0
AVG	0.0070		2325.5	151.6	222.0	13.0
MIN	0.0018	6.2	1052.0	37.6	97.0	2.3
MAX	0.0254	7.6	4789.0	447.0	771.0	53.0
		10/7/2004	6474*	BOD Test Invalid		

* This high value is attributed to a neighboring facility, which for the present shares the same water meter as the Permittee.

APPENDIX D--RESPONSE TO COMMENTS

No comments were received by the Department of Ecology.